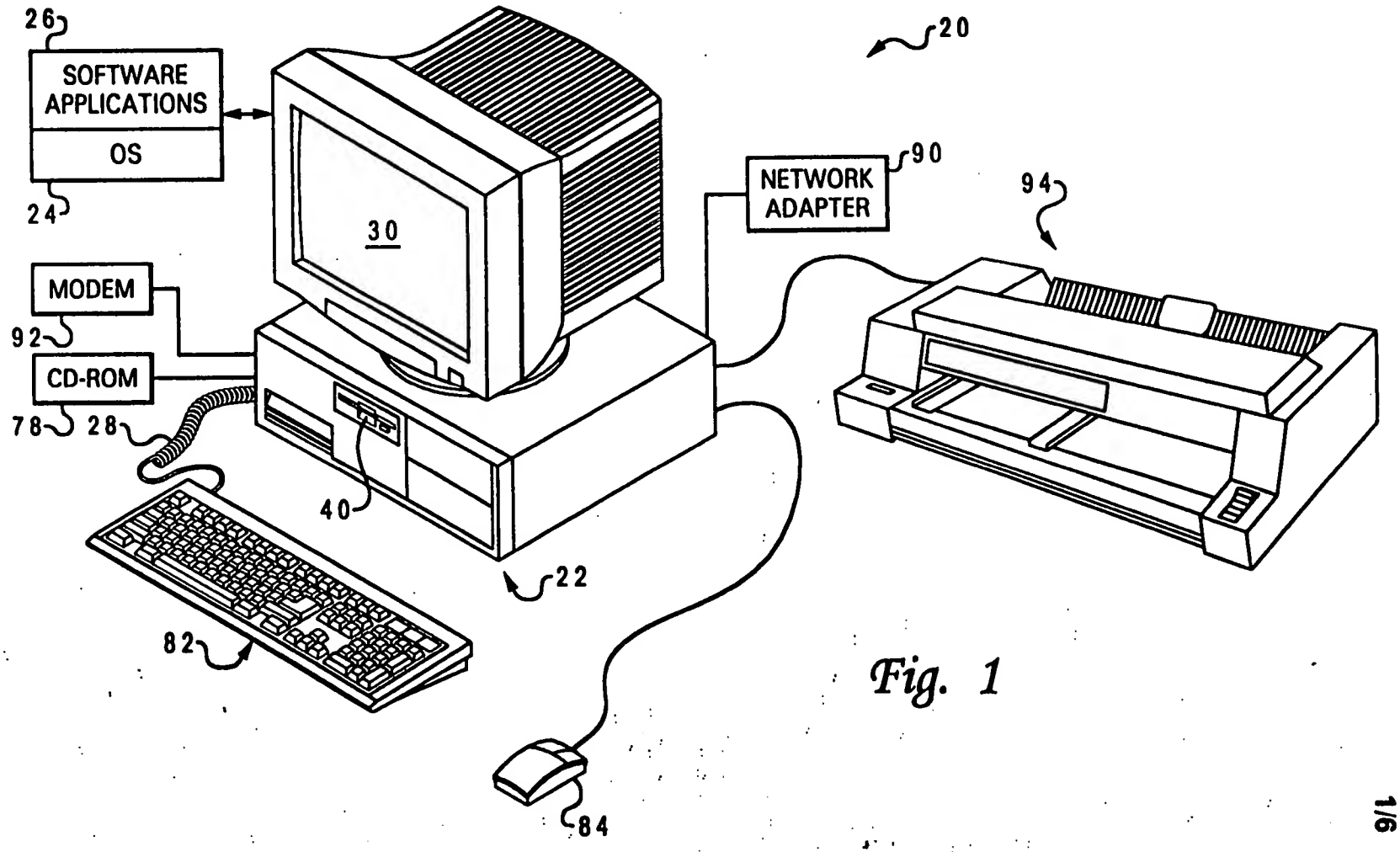
26
SOFTWARE APPLICATIONS
OS
24
20
30
NETWORK ADAPTER
90
94
MODEM
92
CD-ROM
78
28
40
22
82
84

Fig. 1

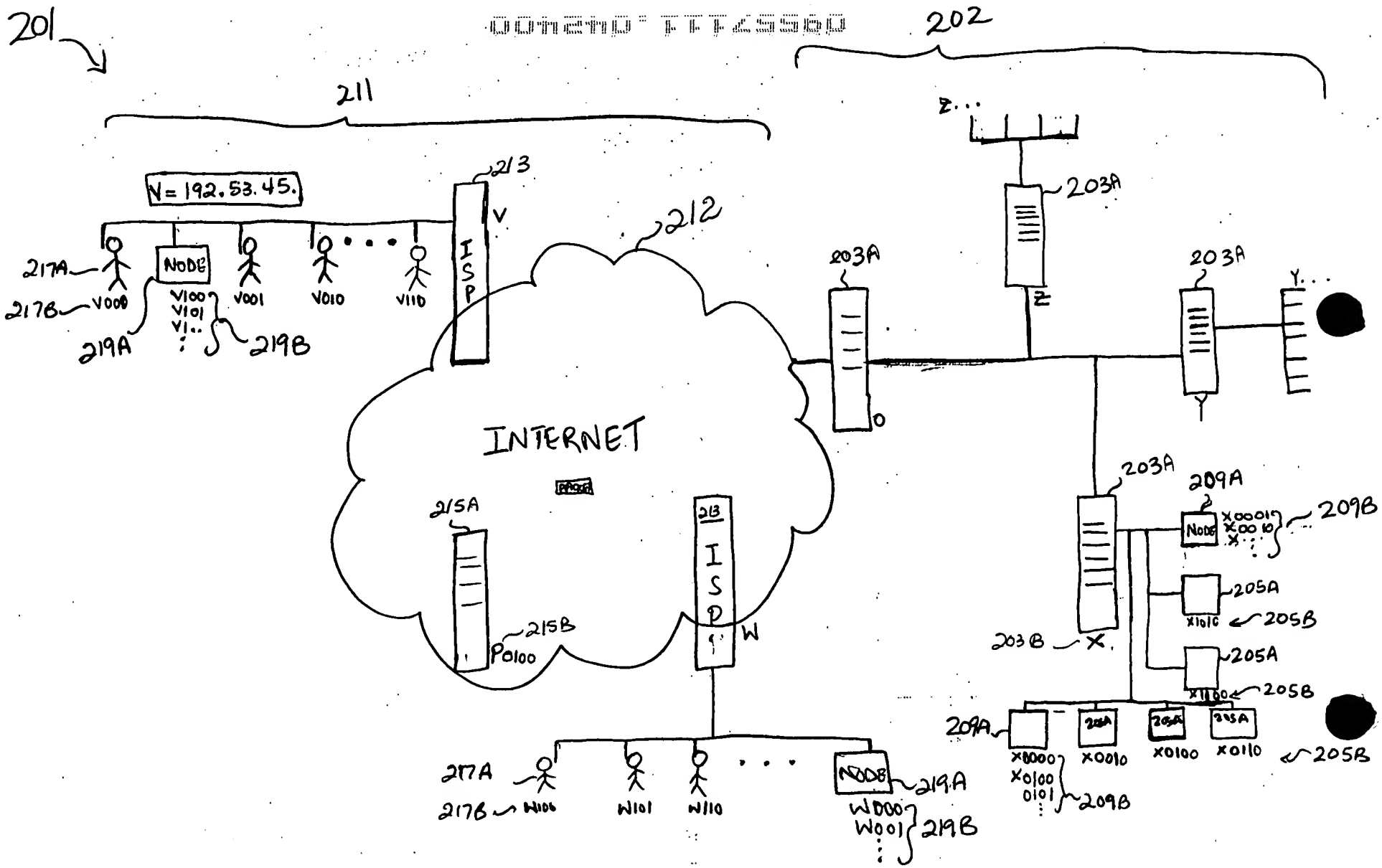
201
202
211
V = 192.53.45.
213
V
212
217A
217B
V000
NODE
V100
V101
V1..
219A
219B
V001
V010
V110
ISP
INTERNET
203A
Z...
Z
Y...
Y
O
215A
215B
P0100
W
W100
W101
W110
W000
W001
NODE
219A
219B
209A
209B
X0001
X0010
X...
205A
205B
X101C
X1100
X0010
X0100
X0110
203B
X
X0000
X0100
0101

FIG 2.

FIG 3

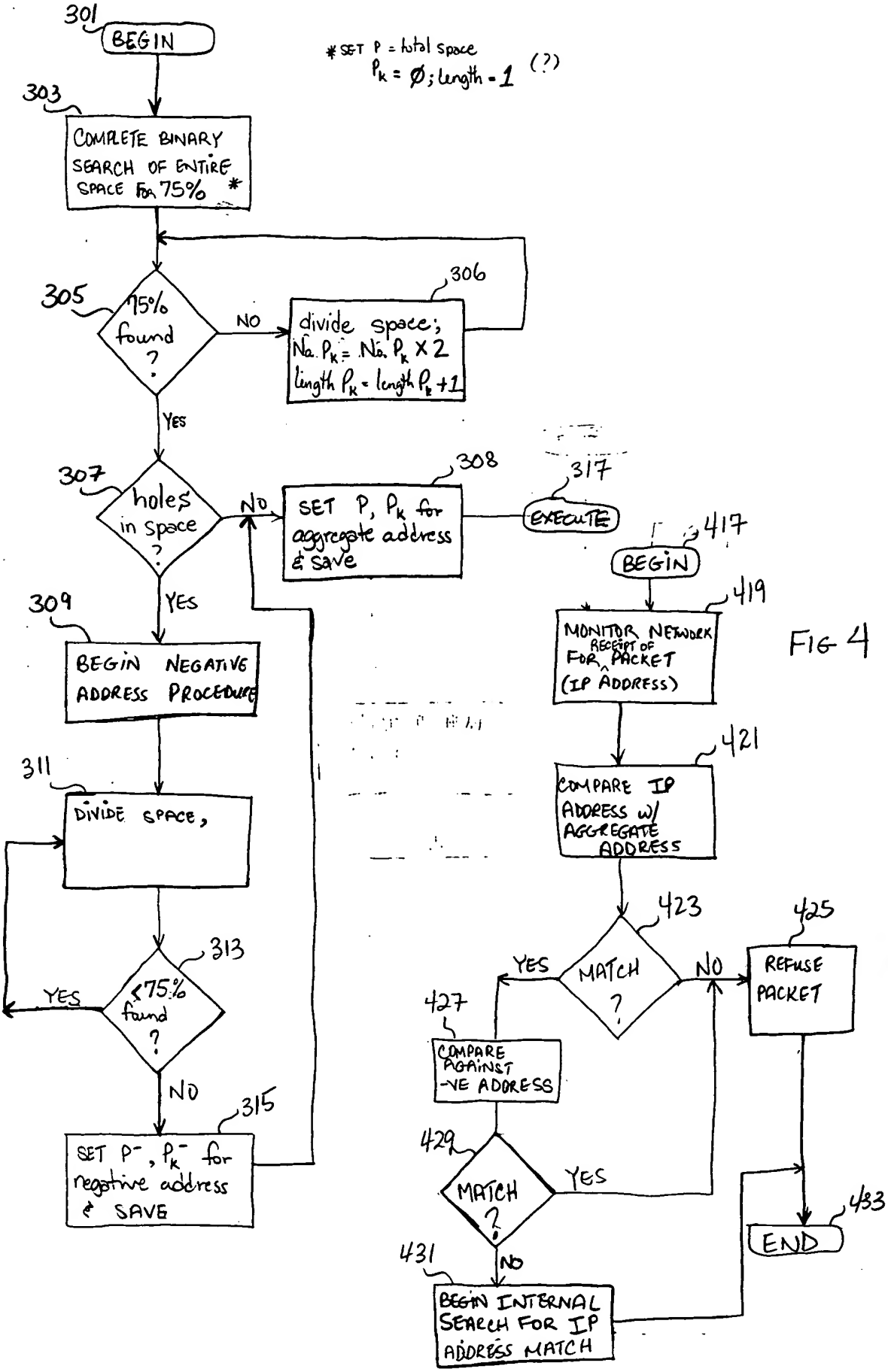
301
BEGIN
* SET P = total space
$P_k = \emptyset$; length = 1 (?)
303
COMPLETE BINARY SEARCH OF ENTIRE SPACE FOR 75% *
305
75% found ?
NO
306
divide space;
No. P_k = No. P_k X 2
length P_k = length P_k + 1
YES
307
holes in space ?
NO
308
SET P, P_k for aggregate address & save
317
EXECUTE
YES
309
BEGIN NEGATIVE ADDRESS PROCEDURE
311
DIVIDE SPACE,
313
≤75% found ?
YES
NO
315
SET P^-, P_k^- for negative address & SAVE

FIG 4

417
BEGIN
419
MONITOR NETWORK FOR RECEIPT OF PACKET (IP ADDRESS)
421
COMPARE IP ADDRESS w/ AGGREGATE ADDRESS
423
MATCH ?
YES
NO
425
REFUSE PACKET
427
COMPARE AGAINST -VE ADDRESS
429
MATCH ?
YES
NO
431
BEGIN INTERNAL SEARCH FOR IP ADDRESS MATCH
433
END